

COMBINED DECLARATION AND PRINCIPAL POWER OF ATTORNEY FOR PATENT APPLICATION

Copy from Prior Application

As a below-named inventor, I (we) hereby declare that:

Is attached hereto.

the specification of which

My (our) residence, post office address and citizenship, is (are) as stated below next to my (our) name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Gated Fabrication of Nanostructure Field Emission Cathode Material Within a Device

was filed on May 24, 2002 as Application No. 10/, and was amended on (If Applicable)						
I hereby state that I (we) have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.						
I (we) acknowledge the duty to disclose all information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part.						
I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.						
Prior Foreign		Foreign Filing Priority Certified Copy				
Application	Country	Da		Not Claimed	Attac	hed? NO
Number(s)		(MM/DD	/1111)		YES	NO
		<u> </u>				
Additional foreign appli hereto:	cation numbers a	re listed on a	suppleme	ntal priority data :	sheet PTO/SB/0	2B attached
I hereby claim the bene			any United	States provisions	al application(s)	isted below:
Application Number(s)		Filing Date (MM/DD/YYYY)				
60/293,780	0 05/25/2001		Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto			
Gray Cary\AU\4085083.1 2500940-991361		1.	· ······ ,			

ו .טטסט..טאו עו Attorne Docket No. UBAT1360-1

I hereby claim the benefit under 35 U.S.C. 120 of any United States Application(s), or 365(c) of any PCT international application designating the United States of America, listed b low and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as d fined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application. **Parent Patent Number** Parent Filing Date U.S. Parent Application or (If applicable) (MM/DD/YYYY) **PCT Parent Number** Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

I (we) hereby appoint the following attorneys and/or patent agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

> Registration No. 29,293 George L. Craig Registration No. 39,120 Vincent A. Branton Registration No. 32,798 Joseph A. Marasco Registration No. 26,096 James M. Spicer Registration No. 38,623 Shelly L. Stafford Registration No. 45,939 Kirk A. Wilson

All of:

UT-Battelle, LLC

P. O. Box 2009

Oak Ridge, Tennessee 37831-8243

Please direct all correspondence and telephone calls to the individuals identified in the Associate Power of Attorney.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of First Inventor: Signature:

Date:

United States of America Citizenship:

1702 Washington Ave., #1 Residence Address:

Knoxville, TN 37917

Gray Cary\AU\4085083.1 2500940-991361

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Micha I A. Guillorn, et al.

Group Art Unit:

Serial No.:

Examiner:

Unknown

Filed:

May 24, 2002

Atty. Dkt. No.

UBAT1360-1

For:

Gated Fabrication of Nanostructure Field

Emission Cathode Material

Within a Device

Copy from Prior Application

ASSOCIATE POWER OF ATTORNEY FOR PATENT APPLICATION Pursuant to 37 CFR 1.34

Commissioner for Patents Washington, D.C. 20231

Sir:

Pursuant to 37 CFR 1.34, I hereby appoint the registered practitioners assigned to Customer No. 25094 including: John L. Adair, Reg. No. 48,828; Mark L. Berrier, Reg. No. 35,066; John J. Bruckner, Reg. No. 35,816; George R. Meyer, Reg. No. 35,284; Steven R. Sprinkle, Reg. No. 40,825, each an attorney or agent of Gray Cary Ware and Freidenrich, L.L.P. to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith. (Assignee's agents are authorized to make corrections to this document).

Please direct all telephone calls to John Bruckner at (512) 457-7233. Please send all correspondence to:

> John J. Bruckner Gray Cary Ware & Freidenrich, L.L.P. 1221 South MoPac Expressway, Suite 400 Austin, TX 78746-6875

Date: 47-42-42

Respectfully submitted,

George L. Craig

Registration No. 29 293

UT-Battelle, L.L.C.

P.O. Box 2009

Oak Ridge, TN 37831-8243

Gray Cary\AU\4084979.1 2500940-991361

F PTO 4505	08-06-2002	Attorney Docket No.: UBAT1360-1
Form PTO-1595		SHEET Copy from Prior Application
To the Honorable Commissioner for thereof.	102179901	record the attached original documents or copy
1. Name of Conveying party(ies): O P I	2. Name	and address of receiving Party(ies):
Michael A. Guillorn Michael L. Simpson Vladimir I. Merkulov Anatoli V. Melechko Douglas H. Lowndes	The state of the s	UT-Battelle, L.L.C. Oak Ridge National Laboratory Bethel Valley Road P.O. Box 2008 Oak Ridge, TN 37831-6255
Additional name(s) of conveying party(ies) Attached? Yes No	17.31.12 Additional	name(s) & address(es) attached? No
3. Nature of conveyance:		-
	ger - inge of name	
Execution Date: 06/11/02 - 06/11/02 - 06	/12/02 - 06/11/02 - 06/	12/02 respectively
Application number(s) or patent number(s): If this document is being filed together with		
A. Patent Application No.(s)	B. Patent	No.(s)
Add	itional numbers attached?	☐ Yes : ☑ No
Name and address of party to whom correspondence concerning document s mailed:	hould be involve	
Name Customer No. 25094	7. Total fe	ee (37 CFR 3.41) <u>\$ 40.00</u>
Gray Cary Ware & Freidenric 1221 So. MoPac Expressway		closed
Suite 400 Austin, Texas 78746	9. Auf underp	thorized to charge the recordation fee or any payment to deposit account No. <u>50-0456</u> . icate copy of this page is attached.
	DO NOT USE THIS	SPACE
9. Statement and signature.		
To the best of my knowledge and belief, to and any attached copy is a true copy of the John J. Bruckner Registration No. 35,816		true and correct 26, '02
/2002 T01071 00000028 1015543 number of pa	ages including cover sheet	, attachments, and document: 5
15A1 40_00 0P		
U\4088948.1 00940-991361		,

Name of S cond Inventor: Signature: Date: Citizenship: Residence Address:	Micha I L. Simpson Ob [27 Zooz United States of America 7745 Nubbin Ridge Road Knoxville, TN 37919
Name of Third I nventor: Signature: Date: Citizenship: Residence Address:	Vladimir I. Merkulov V. Webele 06/26/02 Russia 790 N. Cedar Bluff Rd, #2118 1634 Laurel Ave # R12 Knoxville, TN 37916
Name of Fourth Inventor: Signature: Date: Citizenship: Residence Address:	Anatoli V. Melechko O6/26/02 Russia 1611 Laurell Avenue Knoxville, TN 37916
Name of Fifth Inventor: Signature: Date: Citizenship: Residence Address:	United States of America 2720 Plne Hill Drive

ASSIGNMENT TO UT-BATTELLE

WHEREAS, I (we), the below-named inventors, whose residence and post office is (are) as stated below, have invented certain new and useful improvements in Gated Fabrication of Nanostructure Field Emission Cathode Material Within a Device for which an application for United States Letters Patent was executed on ______, the specification having been filed on May 24, 2002, and accorded U.S. Serial No. 10, 155, 841 and

WHEREAS, UT-Battelle, LLC, a limited liability company of the State of Tennessee, having an office at Oak Ridge National Laboratory, Bethel Valley Road, P.O. Box 2008, Oak Ridge, Tennessee 37831-6255, hereinafter called the ASSIGNEE, is desirous of acquiring the entire right, title and interest in the application and invention and to any Letters Patent that may be granted therefor in the United States of America and in any and all foreign countries. (Agents of ASSIGNEE are authorized to fill in blanks and make corrections in this document).

NOW THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I (we) hereby assign to ASSIGNEE the entire right, title and interest in the application and the invention, to all rights of priority thereto pursuant to the International Convention for the Protection of Industrial Property, and in any Letters Patent on the invention that may be granted in the United States of America and in any and all foreign countries, including any and all Letters Patent that are divisions, reissues, continuations, substitutions or extensions of any Letters Patent or applications therefor on the invention.

I (we) hereby authorize and request the Commissioner of the United States Patent and Trademark Office and the officials of any and all foreign countries to issue any and all of said Letters Patent, when granted, to the ASSIGNEE.

Further, I (we) hereby agree to communicate to said ASSIGNEE or its representatives any facts known to us respecting said invention, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, substitution, renewal and reissue applications, to execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, and to make all rightful oaths and generally do everything possible to aid said ASSIGNEE and its representatives to obtain and enforce proper protection for said invention in the United States of America and in any and all foreign countries.

I (we) further agree that the terms, covenants and conditions of this assignment shall inure to the benefit of ASSIGNEE, its successors, assigns, and legal representatives, and shall be binding on me (us), our heirs, legal representatives, and assigns.

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AUM-084980.1 2500940-991361

Name of First Inventor: Signature: Date:	Michael Q. Lullan
Citizenship:	United States of America
Residence Address:	1702 Washington Ave., #1
Residence Address:	
	Knoxville, TN 37917
State of Tennessee County of	
and State aforesaid, appeared Mic person whose name is subscribed	, 2002, before me, a Notary Public in and for the County :hael A. Guillorn, to me personally known to be the same to the foregoing instrument, and acknowledged that he see and voluntary act and for the uses and purposes therein
WITNESS my hand and seal the d	av and vear last above given
Triffico in ficial and oddraio a	
SEAL	Lake for
	/ Notary Public //
•	CANA A MINISTERIORIE
	C) 4/23/05
Name of Second Inventor:	Michael L. Simpson
Signature:	
Date:	(.11/2003
Citizenship:	United States of America
Residence Address:	
Residence Address:	7745 Nubbin Ridge Road
	Knoxville, TN 37919
State of Tennessee County of	
and State aforesaid, appeared Mic person whose name is subscribed	, 2002, before me, a Notary Public in and for the County that L. Simpson, to me personally known to be the same to the foregoing instrument, and acknowledged that he se and voluntary act and for the uses and purposes therein
WITNESS my hand and seal the da	O. Mr. Co.
· · · · · · · · · · · · · · · · · · ·	Notary Public Expires My Commission Expires 4/23/05
OTAL .	Mu Commission Expires
SEAL	ulazlar
	4/23/08

Name of Third Inventor:	Vladimir I. Merkulov
Signature:	V. Merlie
Date:	06/12/02
Citizenship:	Russia
Residence Address:	1634 Laurel Ave #B-12
State of Tennessee County of	Knoxuille, TN 37916
and State aforesaid, appeared VI person whose name is subscribe	, 2002, before me, a Notary Public in and for the County adimir I. Merkulov, to me personally known to be the same d to the foregoing instrument, and acknowledged that he ree and voluntary act and for the uses and purposes therein
WITNESS my hand and seal the	day and year last above given.
SEAL	Notary Public My Commission Exper
Name of Fourth Inventor:	Anatoli V Melechko
Signature:	
Date:	06/11/2002
Citizenship:	Russia
Residence Address:	1611 Laurell Avenue Knoxville, TN 37916
State of Tennessee County of	
and State aforesaid, appeared An person whose name is subscribed	, 2002, before me, a Notary Public in and for the County natoli V. Melechko, to me personally known to be the same it to the foregoing instrument, and acknowledged that he see and voluntary act and for the uses and purposes therein
WITNESS my hand and seal the o	day and year last above given.
SEAL	Motary Public
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Name of Fifth Inventor.	C Douglas H Lowndes
Signature:	Honales H. hounder
Date:	June 12, 2002
Citizenship:	United States of America
Residence Address:	2720 Pine Hill Drive Knoxville, TN 37932
and State aforesaid, appeared Douglas H person whose name is subscribed to the formation of the person whose name is subscribed to the formation of the person whose name is subscribed to the formation of the person whose name is subscribed to the formation of the person whose name is subscribed to the person whose name is subscr	2, before me, a Notary Public in and for the County I. Lowndes, to me personally known to be the same pregoing instrument, and acknowledged that he roluntary act and for the uses and purposes therein
WITNESS my hand and seal the day and y	year last above given,
SEAL:	Mary Public
Olaria .	My Commission
	Notary Public My Commission Expires 4/23/05
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